

[DuPont Home](#) [Global \[change\]](#)[Our Company](#) [Science](#) [Sustainability](#) [Investor Center](#) [Media Center](#) [Career Center](#)

Select Industry



## DuPont™ Teflon® fluoropolymer resins

[DuPont Home](#) « [Products & Services](#) « [Teflon Industrial](#) « [Products & Services](#) « [Products by Name](#)[Home](#)[Products & Services](#)[Products by Type](#)[Products by Name](#)[Teflon® AF](#)[Teflon® FEP](#)[Teflon® FFR](#)[Teflon® NXT](#)[Teflon® PFA](#)[Teflon® PTFE](#)[Tefzel® ETFE](#)[Zonyl® PTFE](#)[Product Selection Guides](#)[Uses & Applications](#)[Sales & Support](#)[News & Events](#)[Technical Info](#)[Shop Teflon®](#)[CONTACT US](#)[Printer Friendly Version](#)

## Teflon® AF Properties

The high-performance Teflon® AF amorphous fluoropolymer family of products offers a unique combination of superior properties for demanding, high-performance applications.

### Selective Solubility

Teflon® AF can be tailored to have narrow solubility in selected perfluorinated solvents but remains chemically resistant to all other solvents and process chemicals. Initial experiments have shown limited solubility of 3% to 15% for certain Teflon® AF polymers. This solubility allows you to solution-cast ultrathin coatings in the submicron thickness range. Because the family of Teflon® AF are fluoropolymers, their adhesion to substrates may be limited, and surface treatment may be necessary to alter and enhance performance. Teflon® AF swells in fluorochlorocarbons (e.g., Freon®).

### Optical Clarity and Transmission

Because of the inherent characteristics of amorphous polymers, Teflon® AF possesses outstanding optical clarity and transmission. As [Figure 2](#) demonstrates, Teflon® AF has outstanding light transmission from the deep UV range out through and including a significant portion of the IR range. Also, because it does not absorb light, Teflon® AF will not deteriorate with exposure to light. These optical properties, over such a wide range of wavelength and possible exposure conditions, are unmatched by any other polymer.

### Refractive Index

Teflon® AF has an unusually low refractive index as shown in

## Helpful Links

[Related Information](#)[Applications](#)[Available Grades](#)[Performance Comparison](#)[Processing](#)[Safety in Handling and](#)[Use \[.pdf\]](#)[DuPont Products & Services](#)[DuPont Brands & Trademarks](#)